```
<!--StartFragment-->RESULT 6
LEG4_RAT
ID
    LEG4 RAT
                   STANDARD:
                                  PRT:
                                         324 AA.
    P38552;
AC
DT
    01-OCT-1994, integrated into UniProtKB/Swiss-Prot.
DT
    01-OCT-1994, sequence version 1.
DT
    07-MAR-2006, entry version 42.
    Galectin-4 (Lactose-binding lectin 4) (L-36 lactose-binding protein)
DE
DE
     (L36LBP).
GN
    Name=Lgals4;
os
    Rattus norvegicus (Rat).
OC
    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
    Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
OC
    Muroidea; Muridae; Murinae; Rattus.
OX
    NCBI TaxID=10116;
RN
RΡ
    NUCLEOTIDE SEQUENCE [MRNA].
RC
    TISSUE=Intestine;
RX
    MEDLINE=93194902; PubMed=8449956;
    Oda Y., Herrmann J., Gitt M., Turck C.W., Burlingame A.L.,
RA
    Barondes S.H., Leffler H.;
RA
     "Soluble lactose-binding lectin from rat intestine with two different
RT
     carbohydrate-binding domains in the same peptide chain.";
RТ
RL
    J. Biol. Chem. 268:5929-5939(1993).
RN
     [2]
    PROTEIN SEQUENCE OF 13-37 AND 44-66.
RΡ
    MEDLINE=95172227; PubMed=7867792; DOI=10.1016/0014-5793(95)00025-5;
RX
    Tardy F., Deviller P., Louisot P., Martin A.;
RA
     "Purification and characterization of the N-terminal domain of
RТ
RT
    galectin-4 from rat small intestine.";
    FEBS Lett. 359:169-172(1995).
RL
CC
     -!- FUNCTION: Galectin that binds lactose and a related range of
CC
        sugars.
CC
     -!- SUBUNIT: Monomer.
CC
     -!- TISSUE SPECIFICITY: Highly expressed in full-length form in small
CC
        and large intestine and stomach but was not detected in other
        tissues including lung, liver, kidney and spleen.
CC
     -!- DOMAIN: Contains two homologous but distinct carbohydrate-binding
CC
CC
        domains.
CC
     -!- SIMILARITY: Contains 2 galectin domains.
     ______
CC
CC
     Copyrighted by the UniProt Consortium, see http://www.uniprot.org/terms
     Distributed under the Creative Commons Attribution-NoDerivs License
CC
CC
     -----
DR
     EMBL; M73553; AAA41505.1; -; mRNA.
DR
     PIR; A46631; A46631.
DR
     HSSP; P47929; 1BKZ.
DR
     Ensembl; ENSRNOG00000020338; Rattus norvegicus.
DR
     RGD; 3003; Lgals4.
DR
     InterPro; IPR013320; ConA_like_subgrp.
DR
     InterPro; IPR001079; Galectin bd.
     Pfam; PF00337; Gal-bind lectin; 2.
DR
DR
     SMART; SM00276; GLECT; 2.
     PROSITE; PS00309; GALAPTIN; 2.
DR
     Direct protein sequencing; Lectin; Repeat.
KW
FT
     CHAIN
                  1
                       324
                                 Galectin-4.
FT
                                 /FTId=PRO 0000076937.
                                 Galectin 1.
FT
    DOMAIN
                  1
                       152
FT
                178
                                 Galectin 2.
    DOMAIN
                       324
FT
                153
                       177
                                 Linker.
    REGION
                                 Beta-galactoside binding (By similarity).
                257
                       263
FT
     REGION
SQ
     SEQUENCE
               324 AA; 36347 MW; 478024D7322AFE7B CRC64;
```

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77.7%;
                          Score 1367.5; DB 1; Length 324;
 Query Match
 Best Local Similarity
                    76.6%;
                          Pred. No. 2e-105;
 Matches 249; Conservative
                        33;
                            Mismatches
                                       40;
                                           Indels
                                                      Gaps
                                                             2;
         1 MAYVPAPGYQPTYNPTLPYYQPIPGGLNVGMSVYIQGVASEHMKRFFVNFVVGQDPGSDV 60
Qу
           Db
         1 MAYVPAPGYQPTYNPTLPYKRPIPGGLSVGMSIYIQGIAKDNMRRFHVNFAVGQDEGADI 60
        61 AFHFNPRFDGWDKVVFNTLOGGKWGSEERKRSMPFKKGAAFELVFIVLAEHYKVVVNGNP 120
Qy
           61 AFHFNPRFDGWDKVVFNTMQSGQWGKEEKKKSMPFQKGHHFELVFMVMSEHYKVVVNGTP 120
Db
        121 FYEYGHRLPLQMVTHLQVDGDLQLQSINFIGGQPLRPQGPPMM--PPYPGPGHCHQQLNS 178
Qy
           121 FYEYGHRLPLQMVTHLQVDGDLELQSINFLGGQPAASQYPGTMTIPAYPSAGYNPPQMNS 180
Db
Qy
        179 LPTMEGPPTFNPPVPYFGRLQGGLTARRTIIIKGYVPPTGKSFAINFKVGSSGDIALHIN 238
           181 LPVMAGPPIFNPPVPYVGTLQGGLTARRTIIIKGYVLPTAKNLIINFKVGSTGDIAFHMN 240
Db
        239 PRMGNGTVVRNSLLNGSWGSEEKKITHNPFGPGQFFDLSIRCGLDRFKVYANGQHLFDFA 298
Qy
               241 PRIGD-CVVRNSYMNGSWGSEERKIPYNPFGAGQFFDLSIRCGTDRFKVFANGQHLFDFS 299
Db
        299 HRLSAFQRVDTLEIQGDVTLSYVQI 323
Qy
              111111 111:11:1111111
Db
        300 HRFQAFQRVDMLEIKGDITLSYVQI 324
<!--EndFragment-->
```

Application/Control Number: 10/776,601 Page 17

Art Unit: 1642

90% IDENTITY/ BINDS TO SEQ ID NO:16 – THUS, GIVEN THE CROSS-REACTIVITY OF POLYCLONALS IF YOU HAVE ANYTHING WITH BETTER THAT 5 OR 6 CONTIGUOUS AMINO ACIDS, ITS OBVIOUS TO MAKE ANTIBODIES TO IT BECAUSE THE COURTS SAY SO, I ASSUME YOU HAVE THE FORM PARAGRAPH, FURTHER, CROSS REACTIVITY IS WELL KNOWN IN THE ART AND IT WOULD BE EXPECTED THAT AT LEAST A SUBSET OF THE POLYCLONALS PRODUCED WOULD BE ANTIBODIES THAT BIND TO RESIDUES OF SEQ ID NO:6 YADA YADA

YOU CAN FIND A BETTER 102, I LOOKED FOR 2 MINUTES IN

SCORE – FOUND THE FOLLOWING FROM YOUR 2ND SEQ ID NO: 16

LIST – THIS IS ONLY A 102(A) BUT RESEND THE SEARCH – RUSH TO

CHRISTINE CHAN AND ASK FOR THE FULL PRINT-OUT FOR SEQ ID

NO: 16 OF THE FIRST 50 HITS – AND LOOK FOR A GOOD ENOUGH

DATE TO DO A 102(B) ASK HER TO MAKE AN EXTREME RUSH

BECAUSE ITS DUE THIS BIWEEK – EMAIL MARY HALE AND ASK HER

TO LOOK OUT FOR IT AND THAT IT'S A POLYPEPTIDE AND ASK HOW

LONG THE QUE IS AND IF YOU CAN PICK IT UP FROM THE LIBRARY

BEFORE IT GETS TO SCORE.

RESULT 6

LEG4_RAT

ID LEG4_RAT STANDARD; PRT; 324 AA.

AC P38552;